

CLAIMS

1. A reinforcing material-having functional sheet which comprises a sheet-like functional material comprising a functional material powder and a binder resin, and, laminated
5 thereon, a reinforcing sheet, which are bonded,

wherein the reinforcing sheet comprises a woven or non-woven fabric cloth, has a basis weight of from 10 to 400 g/cm², the fiber diameter of a fiber constituting the reinforcing sheet is from 10 to 150 μ m, and the thickness of
10 the reinforcing material-having functional sheet is not more than 0.8 mm.

2. The reinforcing material-having functional sheet according to claim 1 wherein the binder resin is an un-sintered
15 polytetrafluoroethylene resin and contained in an amount of from 50 to 1 % by weight based on the total amount of the sheet-like functional material.

3. The reinforcing material-having functional sheet
20 according to claim 1 or 2 wherein the functional material powder comprises one kind or two or more kinds selected from active carbon, graphite, carbon black, bamboo charcoal, charcoal, titanium oxide, zinc oxide, lead oxide, silica, clay, metal

powder, expanded graphite, water absorbing polymer, silica gel, mildew proofing agent and antibacterial agent.

4. The reinforcing material-having functional sheet
5 according to any one of claims 1 to 3, which is an embossed reinforcing material-having functional sheet.

5. An electrode for electric double-layer capacitors which comprises a sheet-like electrode material comprising a
10 carbon fine powder and a fluorine-containing polymer resin and, laminated thereon, a reinforcing sheet, which are bonded.

6. The electrode for electric double-layer capacitors according to claim 5 wherein the reinforcing sheet comprises
15 any one of a cloth, a mesh, a non-woven fabric cloth and an expand sheet, and has a thickness of from 0.01 to 1.0 mm.

7. The electrode for electric double-layer capacitors according to claim 5 or 6 wherein the carbon fine powder
20 comprises active carbon and/or conductive carbon, and the fluoropolymer resin is polytetrafluoroethylene.

8. The electrode for electric double-layer capacitors

according to any one of claims 5 to 7 wherein the fluorine resin is contained in an amount of not more than 15 % by weight in the electrode material.

- 5 9. An electric double-layer capacitor comprising the electrode for electric double-layer capacitors according to any one of claims 5 to 8.